

# PHENIX WEEKLY PLANNING



5/30/2013  
Don Lynch

## This Week

- Run 13 Continues: run support
- No Scheduled Maintenance this week:
- Ethane Tube Trailer Upgrade Continues: Procedure Approval
- mRPC Test Lab (Formerly RPC Factory): Walkthru done, action items addressed, procedure approval
- VTX strip pixel stave re-design prototype evaluation
- Continue sPHENIX support
  - HCal prototype
  - EMCal prototype design continuing
- MPC-Ex design for run 14
- Future IR evolution modeling - STAR and PHENIX eRHIC upgrades to be

## Next Week

- Run 13 Continues: run support
- No Scheduled Maintenance next week:
- mRPC Test Lab (Formerly RPC Factory): begin operations
- VTX strip pixel stave re-design prototype performance testing
- Continue sPHENIX support
  - HCal prototype
  - EMCal prototype design continuing
- MPC-Ex design for run 14
- End of Run Party (Thursday June 6)
- ESRC Shutdown work review
- Future IR evolution modeling

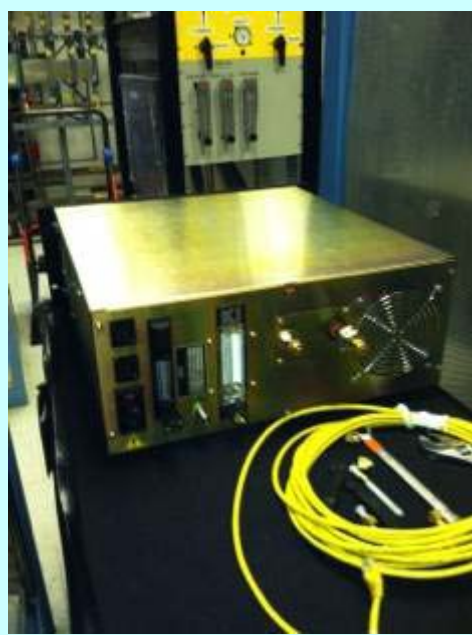


## Ethane Trailer Project:

Procedure Done, After plumbing completed, preliminary walkthru. Final walkthru when 1<sup>st</sup> trailer arrives before run 14



# New Gas Analyzer Project (RPC recirculation and more)



5/30/2013



## mRPC Test Lab Project

TECHNICAL SUPPORT



Procedures done,  
walkthru action  
items addressed,  
ready to begin  
operations

5/30/2013

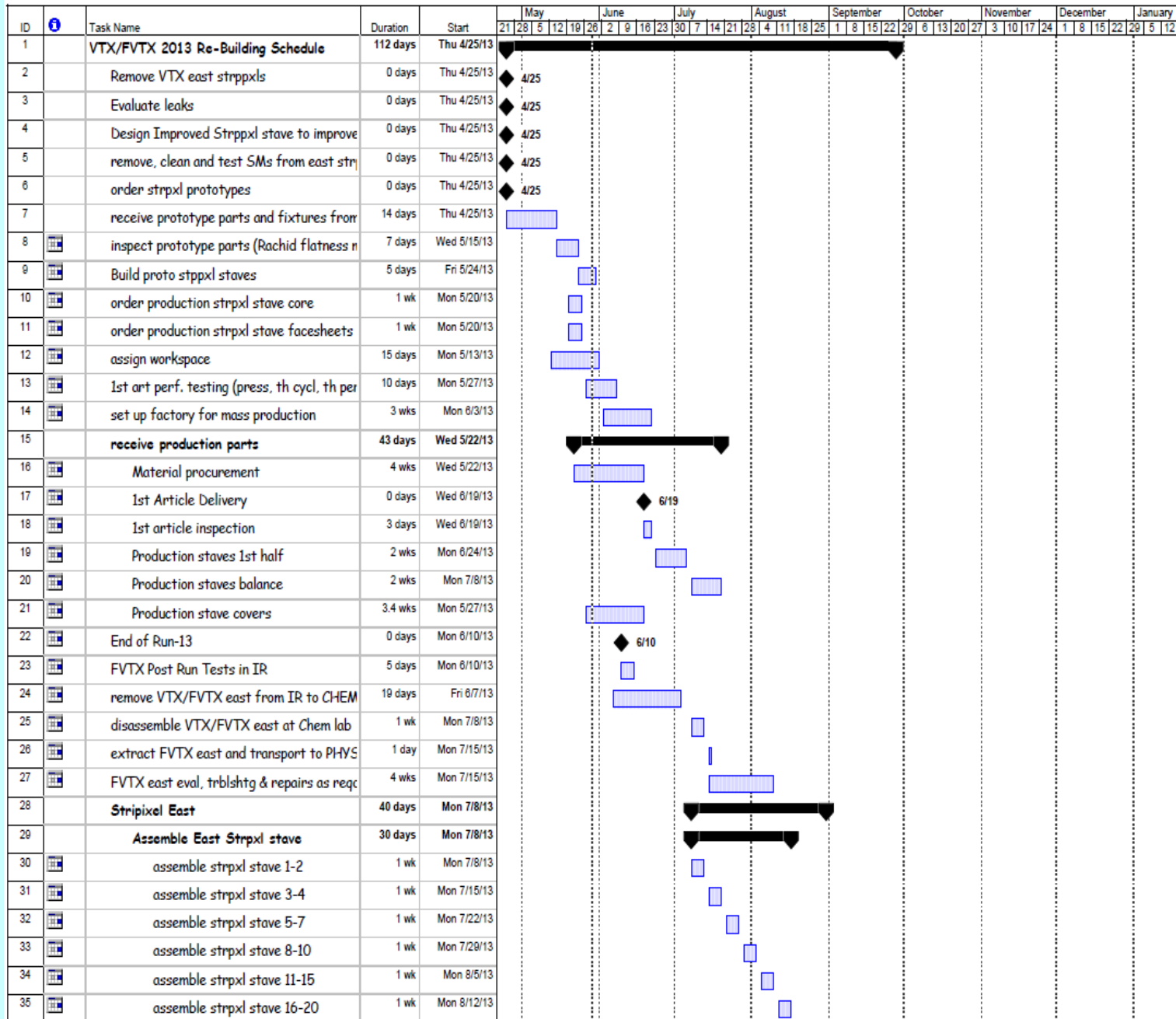


VTX strip-pixel re-design:

1<sup>st</sup> preproduction test article assembled, evaluated, production parts ordered, 3 more preproduction test articles in progress, performance tests this week

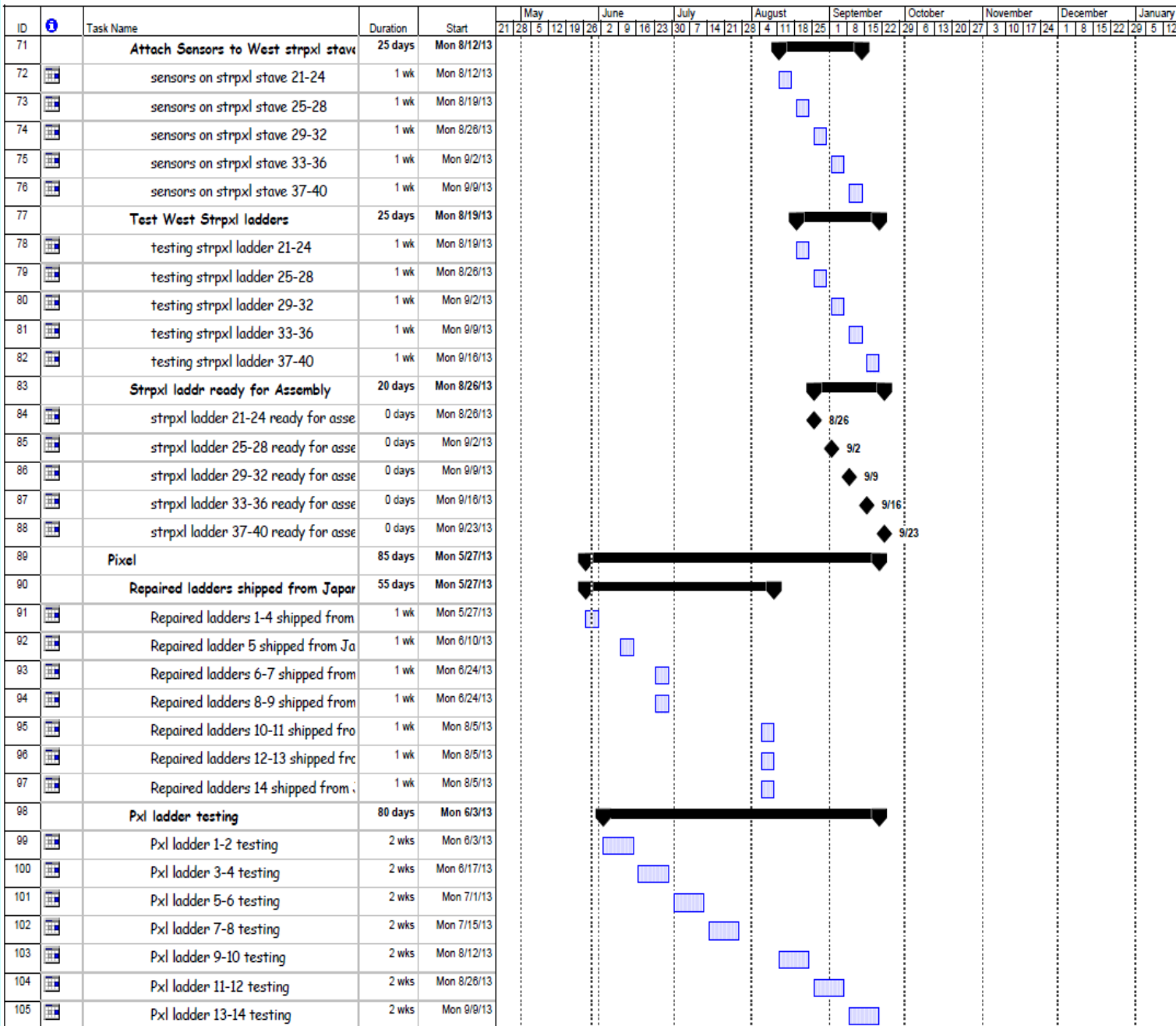
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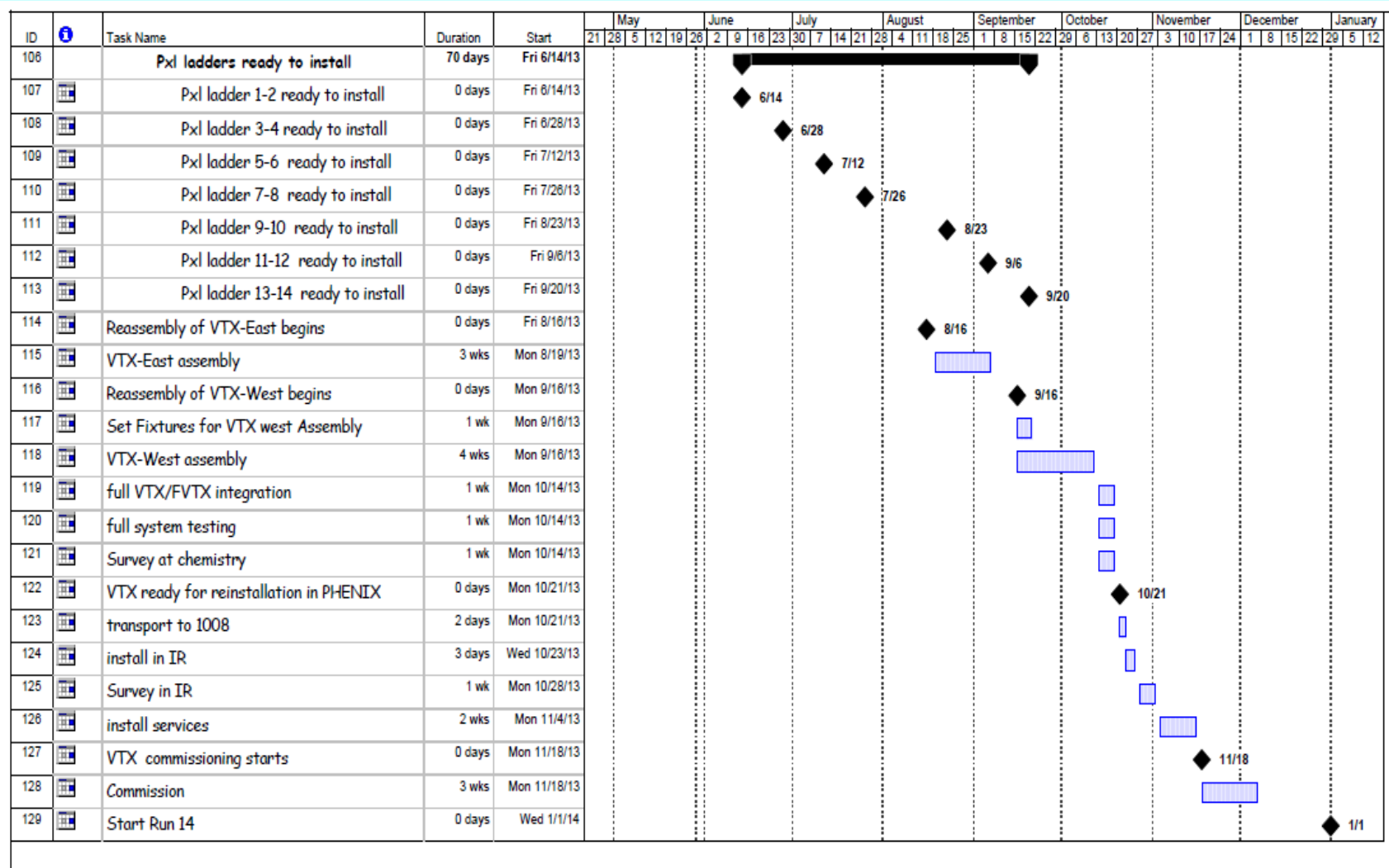














Existing vacuum bellows anti-squirm  
In MPC S Cavity



Proposed vacuum bellows anti-squirm in MPC S Cavity to  
accommodate MPC-Ex

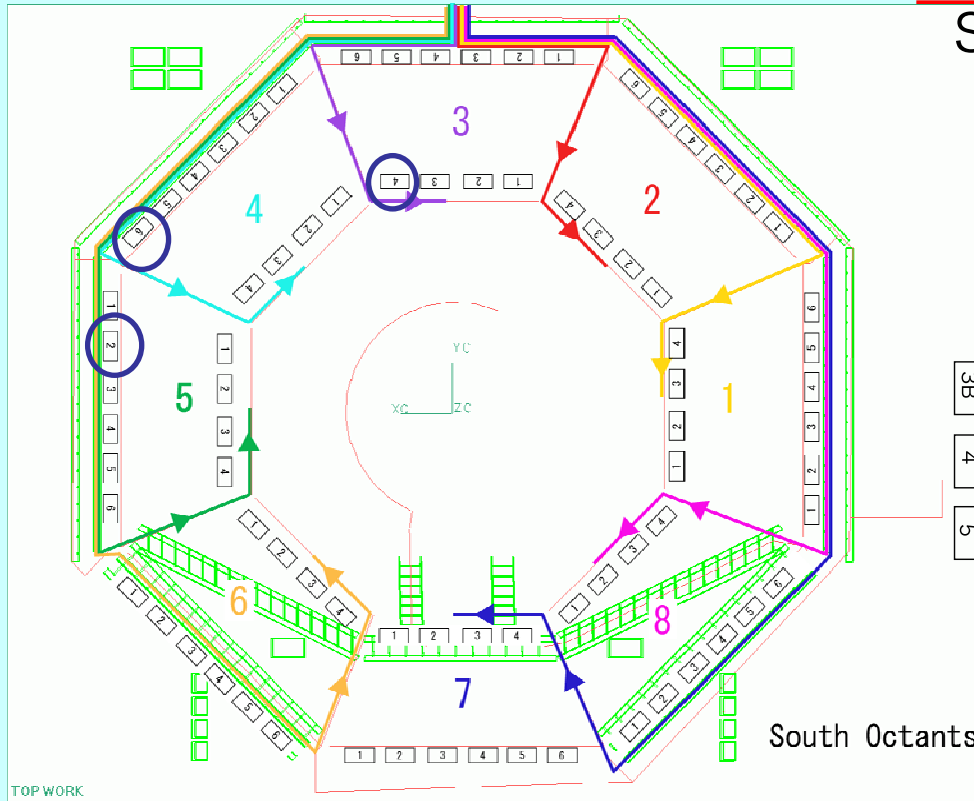


1<sup>st</sup> Tungsten Plate received: Inspection OK

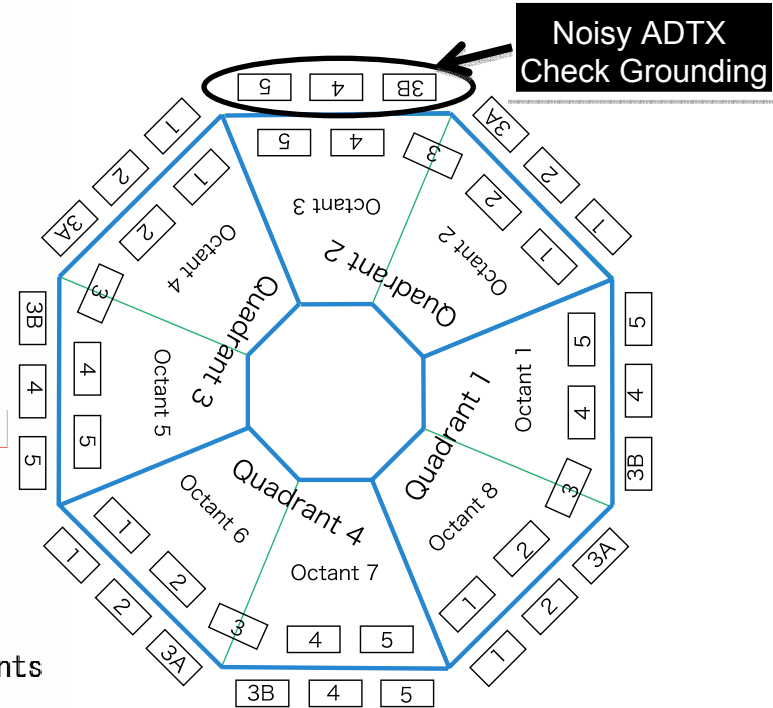


# MuTr South Arm Areas to be accessed

Station-2,3

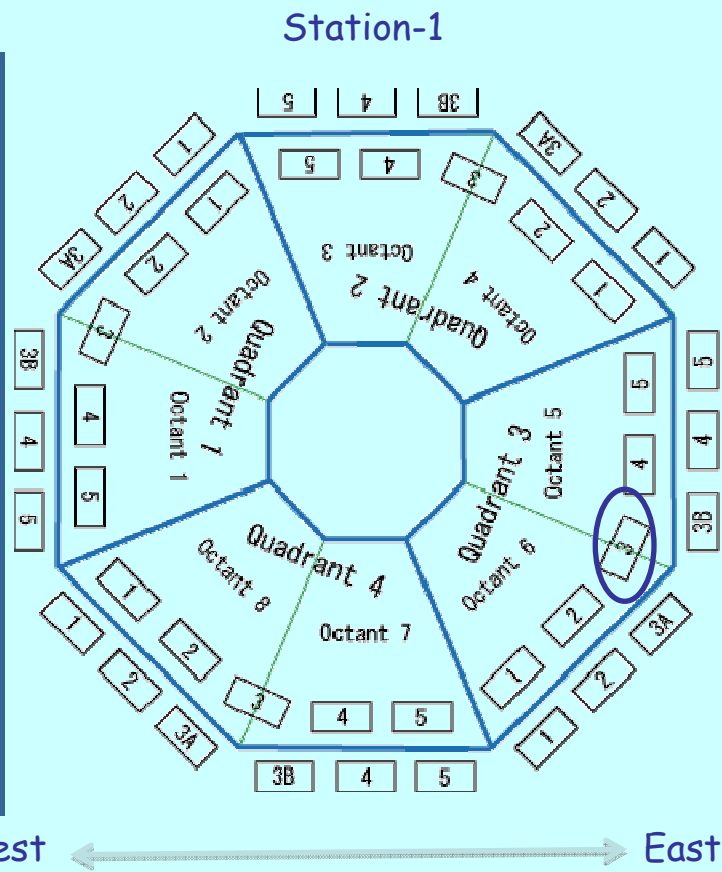
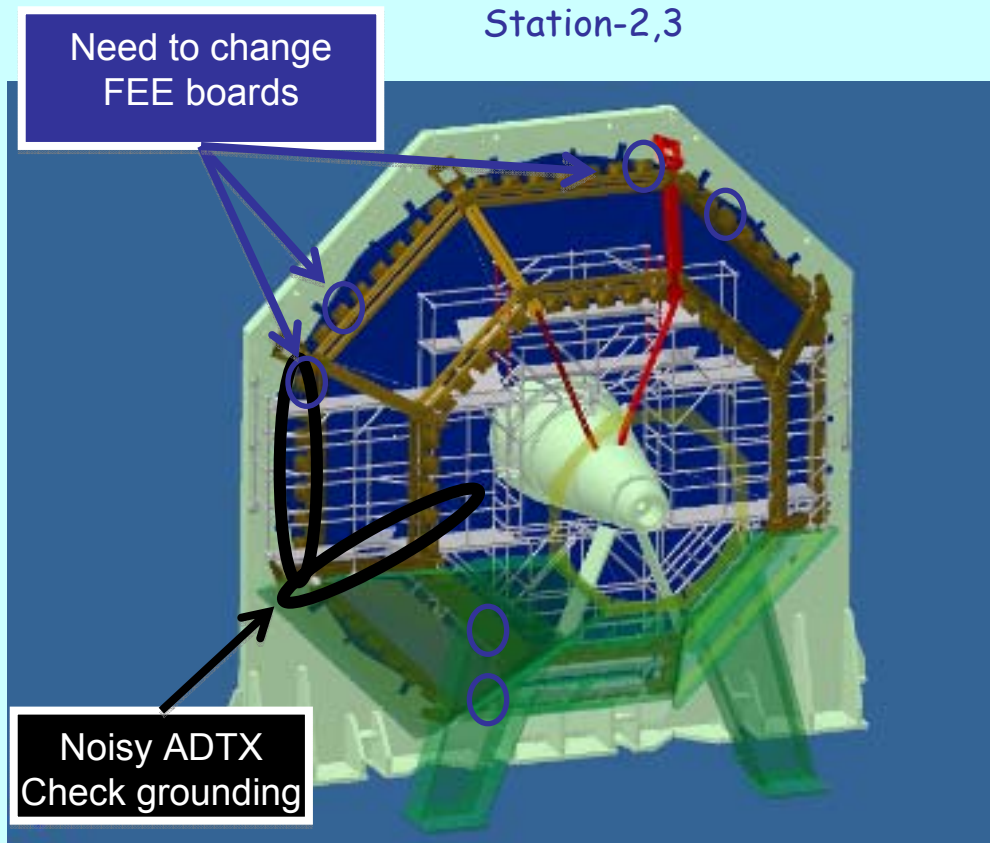


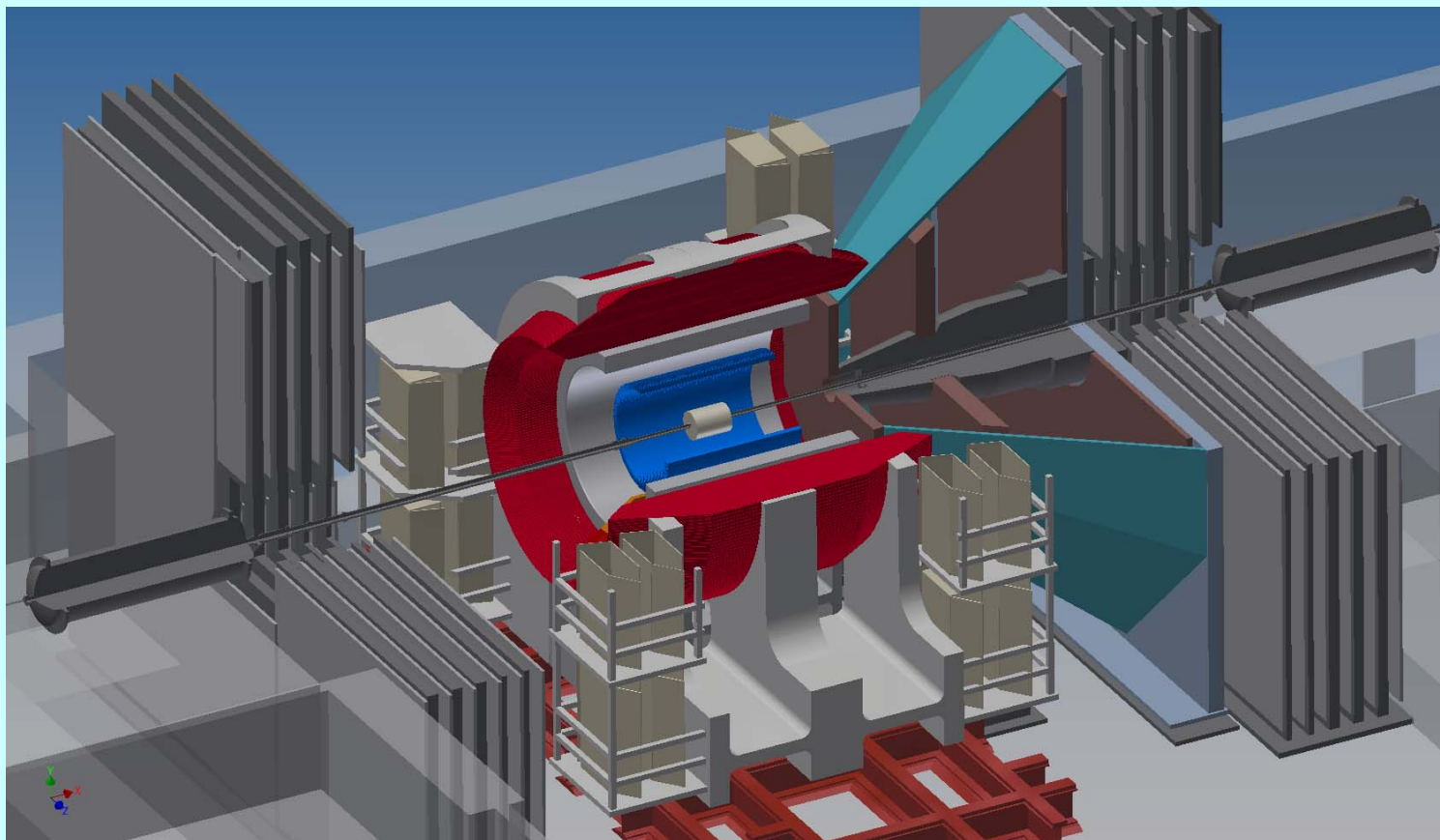
South Station-1 Chassis



TECHNICAL SUPPORT NOW

# MuTr North Arm Areas to be accessed





Model updated with BABAR magnet

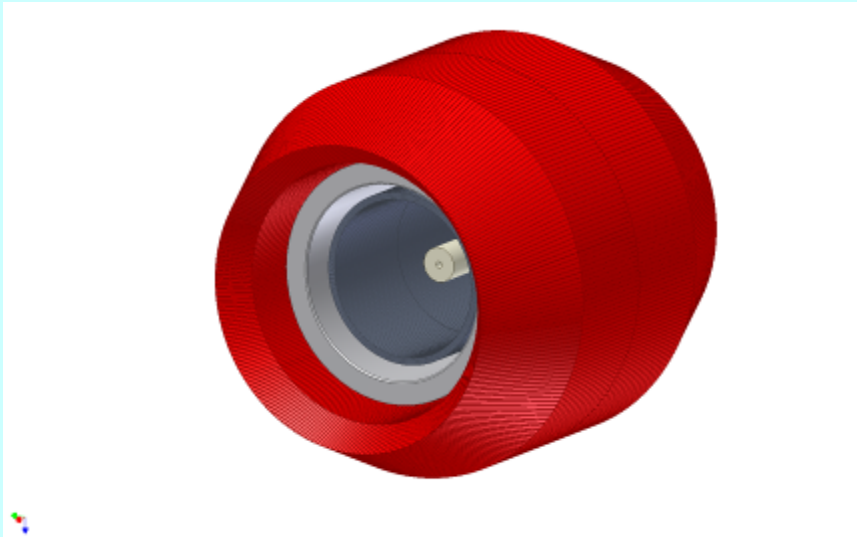
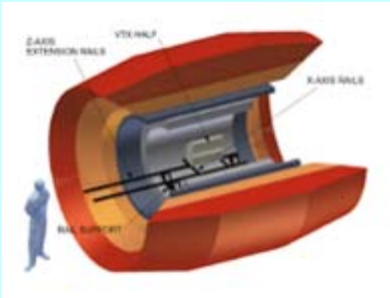
## sPHENIX Proposed Upgrade

Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

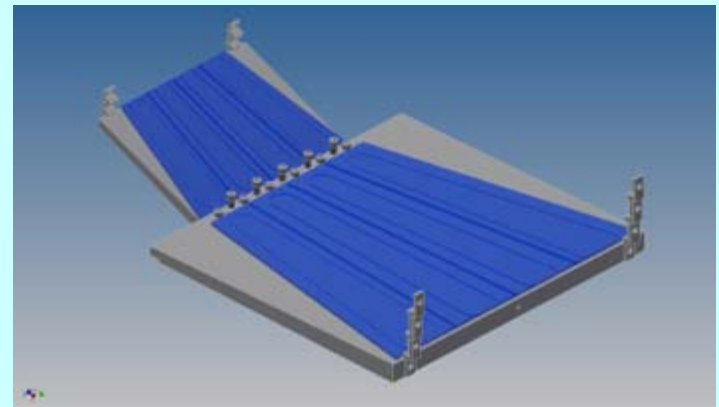
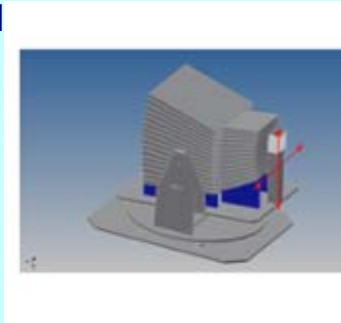
Prototype HCal and EMCal in progress

Bid packages for Hcal steel and scintillators in progress to be issued this week

Possible magnet change to available SC solenoid from SLAC. Will change all detector parameters

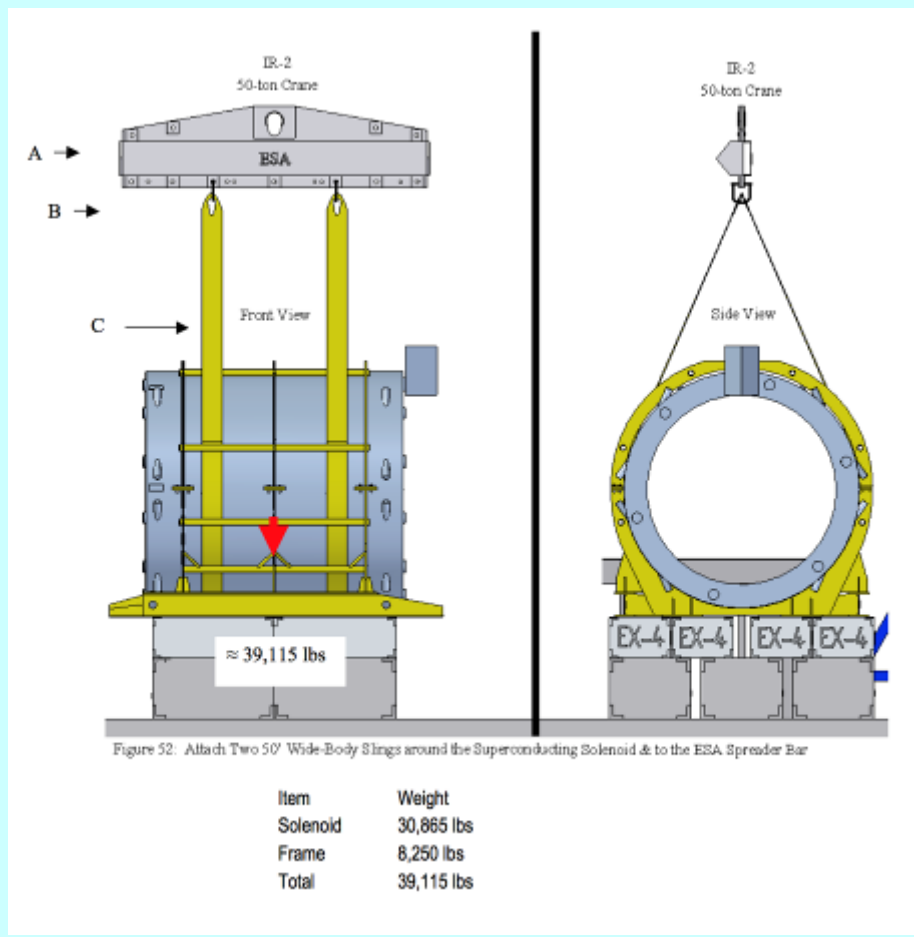


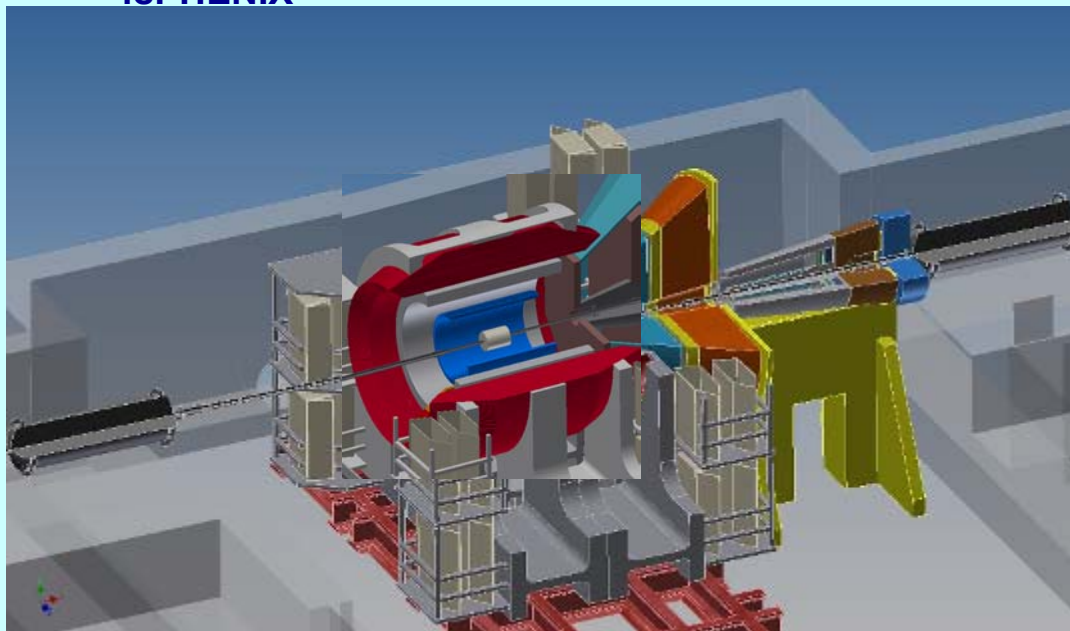
Using SLAC Cryostat HCal ID/OD/L goes from 2400/4400/4922 mm to 3710/5710/6820 mm





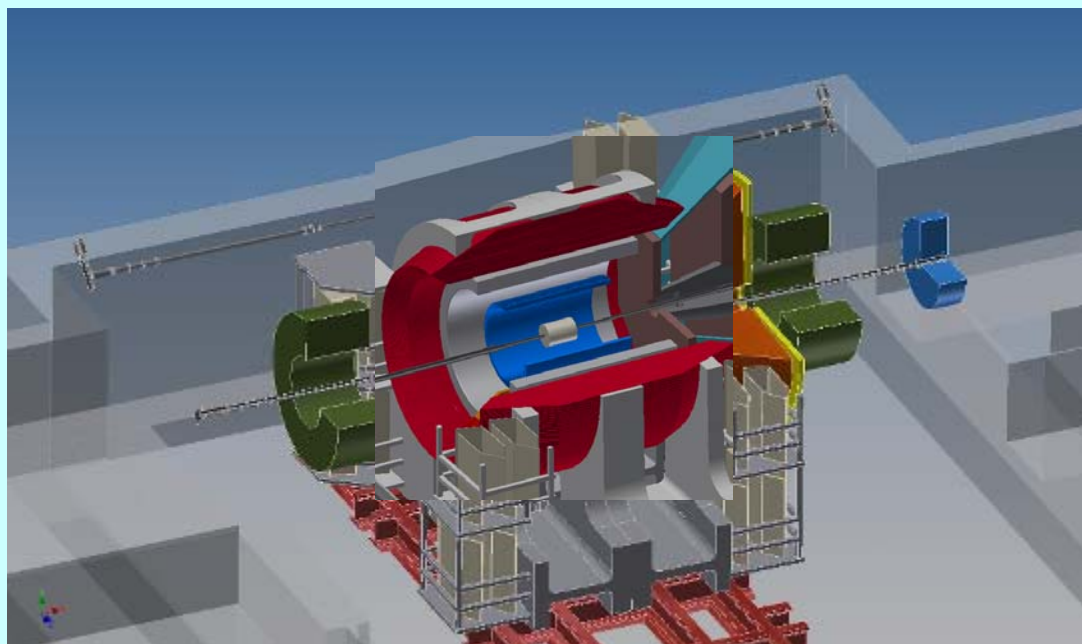
# Shipping and lifting





fsPHENIX & ePHENIX  
Models with BABAR based  
sPHENIX

ePHENIX



## Major Projects This Summer:

- VTX repairs/upgrades/general maintenance (Mike L.)
- DC East Window Replacement (Kenny J.)
- MPC-Ex Initial (partial) Installation (Jim L.)
- mRPC Tests in mRPC Test Lab (formerly RPC Factory) (Frank T.)
- sPHENIX Prototypes assembly & tests (All)
- MuTr troubleshooting and Repairs (Chris P.)
- Window Washer Winch upgrade (Jim L.)

## Other Mechanical (TBD)

## Other Electrical Projects

- HVAC Controls Upgrade (Frank T.)
- Complete Window Washer Controls Upgrade (Frank T.)

## Other Electronics Projects

- Additional upgrading of ADAM system to MODBUS (Sal P.)
- Electronics research in support of sPHENIX and RATCAP (Sal P.)
- Lecroy HV communications upgrade (Sal P.)

## Other Gas System Projects (TBD)

- RPC Gas Recirc. Upgrade (John T.)
- Drawing and Config. Control Improvements (SULI Student)

## Other Infrastructure Projects (TBD)

## Work Permits for 2013 Shutdown

- Start of Shutdown
- VTX/FVTX repair & Upgrade
- MPC-Ex initial/prototype installation
- DC East Window replacement
- sPHENIX prototype assembly and test setup
- MuTr troubleshooting and repairs
- Window Washer Winch replacement/upgrade
- Other TBD
- End of Shutdown/Run 14 Prep



Prep for 2013 shutdown	2/11-6/11/2013
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
VTX Strippixel redesign	In-progress
VTX Strippixel 1 <sup>st</sup> article stave assembly	5/3/2013
VTX Strippixel 1 <sup>st</sup> article qualification/performance tests	5/31/2013
VTX strippixel stave production	5/20-8/30/2013
VTX Strippixel sensor reclamation	4/1-8/30/2013
VTX Strippixel ladder assembly	6/1-9/27/2013
Pixel Ladder repairs	4/1-9/27/2013
End of Run Party	6/6/2013
Run 12 Ends	6/11/2013
Shutdown Standard Tasks	6/11-7/19/2013
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
VTX/FVTX Post run tests	6/11-6/14/2013
Disassemble VTX/FVTX services	6/17-7/3/2013
July 4 <sup>th</sup> Holiday	7/4-7/2013
Remove VTX/FVTX and transport to Chemistry Lab	7/8/2013
Remove Lampshade MMS, East Vertical	7/8-12/2013
Assemble, Test and Install MPC-Ex (Partial, location TBD)	7/22-10/1/2013

TECHNICAL SUPPORT 2013

MuTR Troubleshooting, maintenance and repairs	7/22-9/27/2013
Summer Sunday (8/11) Prep and teardown	7/29-8/6/2013
Summer Sunday (RHIC)	8/4/2013
DC East Window Upgrade and Related Repairs	8/19-9/27/2013
sPHENIX HCal Prototype Assembly/test	8/19-10/15/2013
Labor Day Holiday	9/2/2013
Repair upgrade, reassemble VTX/FVTX (pixels and strip-pixels)	7/11-10/13/2013
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/16-10/27/2013
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Pre-run commissioning and prep for run 14	11/1-12/31/2012
Veterans Day, Lab Holiday	11/11/2013
Prep for EC roll in	11/1-11/9/2013
Roll in EC	11/10-11/12/2013
Prep IR for run	11/1-11/30/2013
Thanksgiving Holidays	11/28-29/2013
Pink/Blue/White sheets	12/14-12/31/2013
Christmas Holiday	12/24-25/2013
New Year's Day Holiday	1/1/2014
Start run 14	1/2/2014

CPR Training: The next 2 CPR Training sessions are closed (full). Next available training dates are: Friday June 21 (1:30-4:30 PM and Wed. June 26 1:30-4:30)

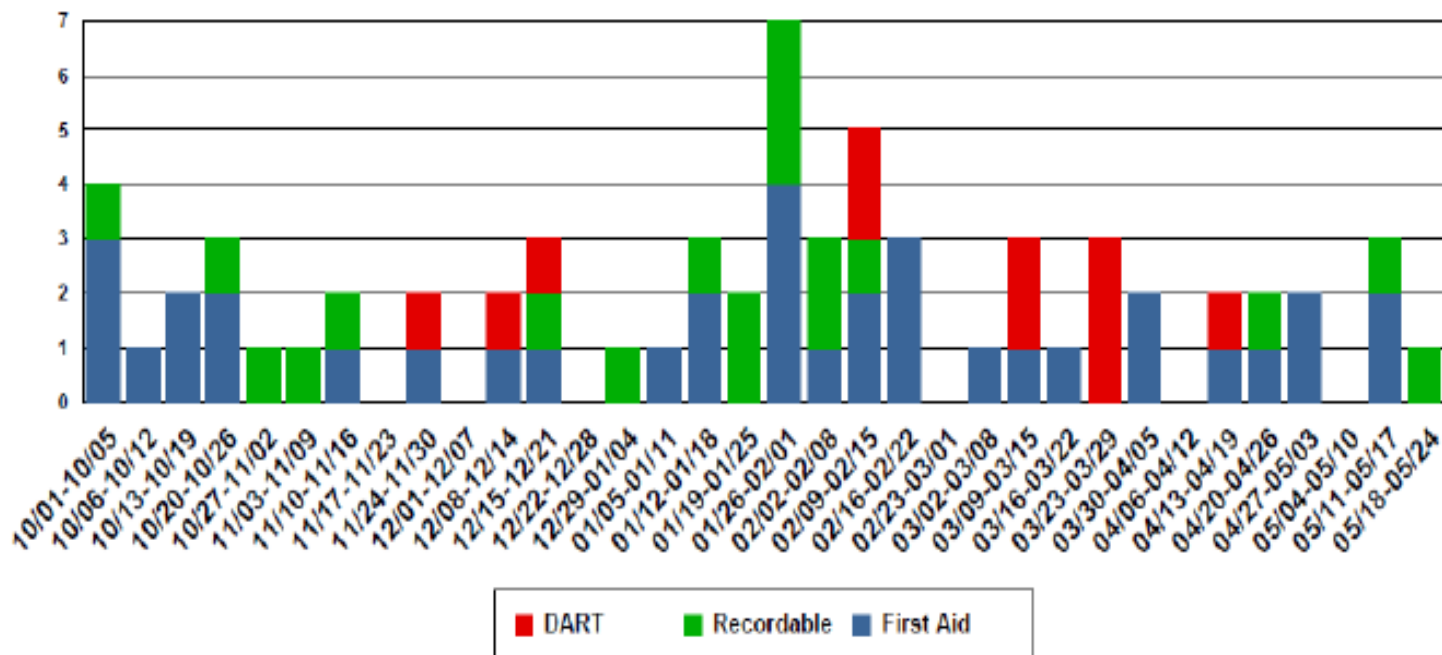
Infrastructure:

Door finally replaced

Railings for trailer offices: in progress



## Injuries Per Week (FY) As of 5/24/2013



### Injury Status:

FY13 YTD: DART – 11, TRC – 30, First Aid – 36

FY12: DART – 17, TRC – 35, First Aid – 70

FY11: DART – 30, TRC – 44, First Aid – 45

FY13 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/OccInj/BNLInjuries.aspx>

### Recent Injuries

5/18/13	Recordable	An employee slipped while walking in sand, injuring their lower arm. The employee received prescription medication at the ER, making this recordable.
5/17/13	First Aid	An employee injured a leg dismounting from a vehicle. At the clinic, first aid was given.





## Recent Events

5/22/13	Non-Reportable	A BNL Contractor has a contract with BNL and with the BP Solar Energy Farm. Yesterday afternoon it was noticed that the contractor moved some soil fill from the BP location to the old chemical hole soil capped area near B670. BNL expected to be notified if the contractor worked in the B670 area and the old chemical hole. There was no damage to the soil cap and no environmental impact. F&O is discussing this with the contractor to improve the work planning interfaces and prevent recurrence. ( <a href="#">Event Link</a> )
5/22/13	SC-4	A refrigeration & air conditioning engineer (RCA) was in the process of recharging the Dunham Busch chiller at Building 911. During the procedure there was an unexpected release of 50-100 lbs. of R-22 refrigerant. Prior to the release, the operating pressure of the machine was 'normal'. Upon release, the RAC shut the machine off and immediately left the area. Further evaluation is forthcoming. ( <a href="#">Event Link</a> )
5/22/13	Non-Reportable	A distracted employee hit the "One Way" sign located in the median of the road while driving in-bound thru the West Gate. She was driving a personal vehicle. The individual reported the incident to BNL Lab Protection. ( <a href="#">Event Link</a> )
5/17/13	Non-Reportable	At approximately 5:30pm, BNL Emergency Services responded to a privately owned vehicle which veered off the road at the corner of Center St. and Bell Ave. crashing into shrubbery outside Building 421 before stopping. The building was not hit and no one was injured. ( <a href="#">Event Link</a> )
5/3/13	SC-4	The South Complex initiated the repair effort on Bldg. 490 Air Handling Unit (AHU) LV-1 Motor Mounting and Motor Sled with repair services performed by Major Systems Mechanical. The South Complex AC Engineer shut down the fan and steam was secured. Red South Complex Group LOTO was applied to both systems with the respective keys and red tag stubs placed in a Group LOTO Lock Box controlled by the South Complex Multi-trade Supervisor as the Responsible Employee. Major Systems Mechanical's Worker then added his Personal LOTO to the Lock Box. The repair effort was completed on Saturday 5/4/2013, however, it was later learned that one of the two contractors who attached their Personal LOTO to the Lock Box was only trained to the Affected worker level, not to Authorized as required. ( <a href="#">Event Link</a> )



# Where To Find PHENIX Engineering Info



*End of Run 13 Coming next week..*



*Time for the End of run party!*

*Next Thursday, June 6, at 12:30 PM*



[http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL\\_SSint-page.htm](http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm)